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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/996,120	11/28/2001	Kwong-Yu Chan	609920600024	1508
24325	7590	01/02/2008		
PATENT GROUP 2N			EXAMINER	
JONES DAY			WONG, EDNA	
NORTH POINT				
901 LAKESIDE AVENUE			ART UNIT	PAPER NUMBER
CLEVELAND, OH 44114			1795	
			MAIL DATE	DELIVERY MODE
			01/02/2008	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

**Application No.**

09/996,120

**Applicant(s)**

CHAN ET AL.

**Examiner**

Edna Wong

**Art Unit**

1795

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12 July 2007.
- 2a) ☒ This action is **FINAL**:                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,2,7,11,13,49-55,62 and 67-74 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1,2,7,11,13,49-55,67 and 68 is/are allowed.
- 6) ☒ Claim(s) 62 and 69-74 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner:
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

This is in response to the Amendment July 12, 2007. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

### ***Response to Arguments***

#### **Claim Rejections - 35 USC § 112**

I. Claims **1-2, 7, 9-11, 13, 49-55 and 62** have been rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The rejection of claims 1-2, 7, 9-11, 13, 49-55 and 62 under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement has been withdrawn in view of Applicants' amendment.

II. Claim **53** has been rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for glucose molecules, does not reasonably provide enablement for organic molecules. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to use the invention commensurate in scope with these claims.

The rejection of claim 53 under 35 U.S.C. 112, first paragraph, has been withdrawn in view of Applicants' amendment.

III. Claims **1-2, 7, 9-11, 13, 49-55 and 62** have been rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential elements, such omission amounting to a gap between the elements. See MPEP § 2172.01. The omitted elements are: the electrochemical oxidation step and the organic molecules that oxidize to gluconic acid.

The rejection of claims 1-2, 7, 9-11, 13, 49-55 and 62 under 35 U.S.C. 112, second paragraph, has been withdrawn in view of Applicants' amendment.

Claim Rejections - 35 USC § 103

I. Claims **1, 7, 11, 49 and 51-54** have been rejected under 35 U.S.C. 103(a) as being unpatentable over **Dupin et al.** (US Patent No. 4,937,058).

The rejection of claims 1, 7, 11, 49 and 51-54 under 35 U.S.C. 103(a) as being unpatentable over Dupin et al. has been withdrawn in view of Applicants' amendment.

II. Claims **2, 55 and 62** have been rejected under 35 U.S.C. 103(a) as being unpatentable over **Dupin et al.** (US Patent No. 4,937,058) as applied to claims 1, 7, 11, 49 and 51-54 above, and further in view of **Barbe et al.** ("Nanocrystalline Titanium Oxide Electrodes for Photovoltaic Applications", *J. Am. Ceram. Soc.* (1997), Vol. 80, No. 12, pp. 3157-3171).

The rejection of claims 2, 55 and 62 under 35 U.S.C. 103(a) as being unpatentable over Dupin et al. as applied to claims 1, 7, 11, 49 and 51-54 above, and

further in view of Barbe et al. has been withdrawn in view of Applicants' amendment.

**III.** Claims **9-10, 13 and 50** have been rejected under 35 U.S.C. 103(a) as being unpatentable over **Dupin et al.** (US Patent No. 4,937,058) as applied to claims 1, 7, 11, 49 and 51-54 above, and further in view of **Katsoulis et al.** (US Patent No. 3,668,014) and **Ruetschi** (US Patent No. 3,160,526).

The rejection of claims 9-10, 13 and 50 under 35 U.S.C. 103(a) as being unpatentable over Dupin et al. as applied to claims 1, 7, 11, 49 and 51-54 above, and further in view of Katsoulis et al. and Ruetschi has been withdrawn in view of Applicants' amendment.

### ***Response to Amendment***

#### ***Claim Rejections - 35 USC § 112***

Claims **62 and 69-74** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

#### **Claim 62**

line 2, "the passing step" lacks antecedent basis.

#### **Claim 69**

lines 1-2, is a duplicate of claim 2.

Claim 70

lines 1-2, is a duplicate of claim 7.

Claim 71

lines 1-2, is a duplicate of claim 50.

Claim 72

line 1, "the glucose" lacks antecedent basis.

Claim 73

lines 1-2, is a duplicate of claim 54.

Claim 74

line 1, is a duplicated of claim 55.

***Allowable Subject Matter***

The following is a statement of reasons for the indication of allowable subject matter:

Claims **1-2, 7, 11, 13, 49-55, 62, 67 and 69-74** define over the prior art of record because the prior art does not teach or suggest a method comprising the step of catalyzing as presently claimed.

Claim 68 defines over the prior art of record because the prior art does not teach or suggest a method comprising the step of catalyzing as presently claimed.

The prior art does not contain any language that teaches or suggests the above. *Sato et al.* teaches an electrode for use in the electrolysis of aqueous solutions of metal halides. The electrode comprises an electrically conductive substrate and, formed thereon, a coating comprising Pt/SnO/CoO. The present claims recite the electrochemical oxidation of organic molecules in liquid solution with a catalyst comprising a mixture of Pt/Co/Sn. Therefore, a person skilled in the art would not have been motivated to adopt the above conditions, and a prima facie case of obviousness cannot be established.

Claims 62 and 69-74 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Edna Wong whose telephone number is (571) 272-1349. The examiner can normally be reached on Mon-Fri 7:30 am to 4:00 pm.

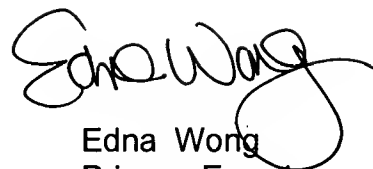
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nam Nguyen can be reached on (571) 272-1342. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



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Edna Wong  
Primary Examiner  
Art Unit 1795

EW  
December 26, 2007